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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,097	08/14/2008	Thomas Schuster	P/746-10 V1408	4051

2352 7590 07/15/2010
OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER

BROWE, DAVID

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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07/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,097	Applicant(s) SCHUSTER ET AL.	
	Examiner DAVID M. BROWE	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-12 are pending.

Applicants timely submission of amendments and arguments together with a Request for Continued Examination (RCE), all filed June 25, 2010, is acknowledged.

Withdrawal of Prior Claim Rejections - 35 USC § 112 1st Paragraph

Claim 1 has been satisfactorily amended to narrow the scope of "prevention" to include only "titanium dioxide-induced breakdown of UV absorbers", wherein the titanium dioxide is understood to be completely isolated from its environment and thus never in direct contact with the UV absorbers. Therefore, the 35 USC § 112 1st Paragraph rejection of claims 1-7 presented in the Final Office Action is hereby withdrawn.

Withdrawal of Prior Claim Rejections - 35 USC § 102 and 103

Neither Vatter *et al.* nor Schumacher *et al.* explicitly disclose that the effect pigments have a laminar structure, as stipulated in the newly amended claims. Therefore, the 35 USC § 102 and § 103 rejections of claims 1-12 presented in the Final Office Action are hereby withdrawn. However, a new grounds of rejection is being made herein below.

NEW GROUNDS OF REJECTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher *et al.* (U.S. Patent Application No. 2003/0104198), in view of Argoitia *et al.* (U.S. Patent Application Pub. No. 2003/0190473).

Applicant Claims

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Applicants claim a UV-protective cosmetic preparation comprising one or more UV absorbers and effect pigments, wherein the effect pigments have a laminar structure and contain titanium dioxide and at least one protective coating of silicon dioxide isolating the titanium dioxide from its environment to prevent breakdown of the UV absorbers. The effect pigments are pearlescent pigments, have a layer-on-substrate build-up, and a transparent protective coating. The cosmetic preparation is a sunscreen agent in the form selected from the group consisting of a cream, lotion, milk, emulsion, spray emulsion, jelly, oil, spray oil, and an aerosol. The UV absorber is an organic UV absorber selected from the group consisting of benzophenones, hydroxynaphthoquinones, phenylbenzoxazoles, phenylbenzimidazoles, digalloyl trioleate, aminobenzoic acid esters, salicylic acid esters, acyclic dienones, cinnamic esters, benzalazine, avobenzene, paraaminobenzoic acid and derivatives thereof, cinnamates, salicylates, camphor derivatives, benzimidazoles, 4-isopropylidibenzoylmethane, 4-(1,1-dimethylethyl)-4'-methoxydibenzoylmethane, 2,4-dimethyl-4'-methoxydibenzoylmethane and mixtures thereof.

Applicants also claim a method for the production of a UV-protective cosmetic preparation that includes at least one UV absorber, said method comprising providing in said preparation at least one effect pigment, wherein the at least one effect pigment has a laminar structure and contains titanium dioxide and at least one protective coating of silicon dioxide isolating the titanium dioxide from its environment to prevent titanium dioxide-induced breakdown of the UV absorber. The effect pigments are pearlescent

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pigments, have a layer-on-substrate build-up, and a transparent protective coating. The cosmetic preparation is a sunscreen agent.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Schumacher *et al.* disclose a UV-protective cosmetic preparation comprising one or more UV absorbers and effect pigments, wherein the effect pigments contain titanium dioxide and at least one protective coating of silicon dioxide isolating the titanium dioxide from its environment to prevent breakdown of the UV absorbers (Pg. 1, secs. 0002, 0004-0007, 0008, 0010, 0020; Pg. 2, secs. 0022, 0024-0026, 0028-0031; Pg. 3, sec. 0041, 0043, 0045-0047). The effect pigments are pearlescent pigments, have a layer-on-substrate build-up, and a transparent protective coating (Pg. 1, secs. 0010, 0016, 0020; Pg. 2, secs. 0024-0026). The cosmetic preparation is a sunscreen agent in the form selected from the group consisting of a cream, lotion, milk, emulsion, spray emulsion, jelly, oil, spray oil, and an aerosol (Pg. 3, secs. 0041, 0043, 0045-0047). The UV absorber is an organic UV absorber selected from the group consisting of benzophenones, hydroxynaphthoquinones, phenylbenzoxazoles, phenylbenzimidazoles, digalloyl trioleate, aminobenzoic acid esters, salicylic acid esters, acyclic dienones, cinnamic esters, benzalazine, avobenzene, paraaminobenzoic acid and derivatives thereof, cinnamates, salicylates, camphor derivatives, benzimidazoles, 4-isopropylidibenzoylmethane, 4-(1,1-dimethylethyl)-4'-methoxydibenzoylmethane, 2,4-dimethyl-4'-methoxydibenzoylmethane and mixtures thereof (Pg. 3, secs. 0041, 0043, 0046).

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Schumacher *et al.* also disclose a method for the production of a UV-protective cosmetic preparation comprising providing in said preparation at least one effect pigment, wherein the effect pigments contain titanium dioxide and at least one protective coating of silicon dioxide isolating the titanium dioxide from its environment. The effect pigments are pearlescent pigments, have a layer-on-substrate build-up, and a transparent protective coating. The cosmetic preparation is a sunscreen agent (Pg. 1, secs. 0002, 0004-0007, 0008, 0010, 0020; Pg. 2, secs. 0022, 0024-0026, 0028-0031; Pg. 3, sec. 0041, 0043, 0045-0047).

Argoitia *et al.* disclose a cosmetic preparation comprising laminar effect pigments, wherein the effect pigments can contain titanium dioxide and at least one protective coating of silicon dioxide isolating the titanium dioxide from its environment (Pg. 2, secs. 0017; Pg. 3, sec. 0022; Pg. 8, secs. 0098-0099, 0104; ; Pg. 9, sec. 0105; Pg. 10, secs. 0117, 0120; Pg. 11, secs. 0126-127, 0132, 0135-0136; Pg. 12, secs. 0139, 0147). The effect pigments are pearlescent pigments, have a layer-on-substrate build-up, and a transparent protective coating (Pg. 2, sec. 0017; Pg. 3, sec. 0022; Pg. 5, sec. 0067; Pg. 11, secs. 0127, 0132; Pg. 12, sec. 0139; Pg. 14, sec. 0170; Pg. 17, sec. 0198).

Ascertainment of the Difference Between the Scope of the Prior Art and the Claims (MPEP §2141.012)

Schumacher *et al.* do not explicitly disclose that the effect pigments have a laminar structure. This deficiency is cured by the teaching of Argoitia *et al.*

Finding of Prima Facie Obviousness Rational and Motivation

(MPEP §2142-2143)

It would have been *prima facie* obvious for one of ordinary skill in the art at the time of the present invention to combine the respective teachings of Schumacher *et al.* and Argoitia *et al.*, outlined *supra*, to devise applicants claimed UV-protective cosmetic preparation and method of making the same.

Effect pigments are well known and widely used in the cosmetics industry for imparting appealing and exciting visual effects; and sunscreen preparations containing effect pigments are often applied by those who want to enjoy the look of shimmering or glittering in the sunshine. Since Argoitia *et al.* disclose that laminar particles that can contain a layer of titanium dioxide encapsulated by an outer layer of silicon dioxide can readily exhibit both diffractive and interference effects for the generation of unique angle-dependent color impression (Pg. 2, sec. 0017), one of ordinary skill in the art would be motivated to incorporate a laminar shaped effect pigment particle containing titanium dioxide encapsulated by a protective layer of silicon dioxide into the sunscreen formulation of Schumacher *et al.*, with the reasonable expectation that the resulting formulation will impart unique and appealing angle-dependent color impression.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of

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ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new grounds of rejection.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID M. BROWNE whose telephone number is 571-270-1320. The examiner can normally be reached on Monday-Friday 7:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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DAVID M. BROWE
Patent Examiner, Art Unit 1616

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616